1. A method for automatically tracking an object to keep the object in the field of view of a video camera, and create an augmented reality display comprising the image from the video camera combined with computer-generated graphics to create an augmented reality display, the method comprising:

resolving the camera's field of view;

determining the location of an object to be tracked relative to the camera's field of view;

in response to the determined location of the object, moving the camera to maintain the object in the camera's field of view;

using a computer to generate a graphical image representing unseen information that corresponds to the camera's viewpoint; and

augmenting the video image with the graphical image, to create an augmented-reality image having the tracked object therein, for presentation to a user.

2. The method of claim 1 wherein the augmenting step comprises using onboard video mixing through use of a video capture device with the computer.

3. The method of claim 1 wherein the augmenting step comprises using an external video mixing solution, to combine real and computer-generated graphical elements outside of the computer.

4. The method of claim 1 for use in operations.

5. The method of claim 1 for use in training.

6. The method of claim 1 in which moving the camera comprises providing a motorized camera mount for the camera, and controlling the camera mount.

7. The method of claim 6 in which the resolving step comprises calibrating the camera and camera mount.

8. The method of claim 6 in which the camera mount is coupled to a fixed platform.

9. The method of claim 6 in which the resolving step comprises using the camera and camera mount in conjunction with a separate camera position tracking system to generate a combined position and orientation value.

10. The method of claim 6 in which the computer controls the camera mount, and the resolving step comprises using the computer to resolve the field of view based on the current camera position received by the computer from the camera, to accomplish a feedback control system.

11. The method of claim 6 in which the computer controls the camera mount, and the resolving step comprises using the computer to position the camera in a feed-forward control system.

12. The method of claim 6 in which the camera mount is not stationary.

13. The method of claim 12 in which the camera mount is attached to a vehicle.

14. The method of claim 12 in which the camera mount is attached to an aircraft.

15. The method of claim 12 in which the camera mount is attached to a watercraft or ship.

16. The method of claim 12 in which the camera mount is attached to a gimbaled arm.

17. The method of claim 6 in which the resolving step comprises the motorized camera mount reporting the field of view of the camera to the computer.

18. A method for automatically tracking an object to keep the object in the field of view of a video camera, and create an augmented reality display comprising the image from the video camera combined with computer-generated graphics to create an augmented reality display, the method comprising:

providing a motorized camera mount for the camera;

resolving the camera's field of view;

determining the location of an object to be tracked relative to the camera's field of view;

in response to the determined location of the object, moving the camera to maintain the object in the camera's field of view;

using a computer to generate a graphical image representing unseen information that corresponds to the camera's viewpoint;

using the computer to control the camera's viewpoint; and

using a video capture device along with the computer to accomplish video mixing that augments the video image with the graphical image, to create an augmented-reality image having the tracked object therein, for presentation to a user.